

## SOLVENT VAPOR INFILTRATION OF ORGANIC MATERIALS INTO NANOSTRUCTURES

### ABSTRACT OF THE DISCLOSURE

- 5 Spaces in a nanostructure can be filled with an organic material while in the solid state below  $T_m$  (without heating) by exposing the organic material to solvent vapor while on or mixed with the nanostructured material. The exposure to solvent vapor results in intimate contact between the organic material and the nanostructured material without having to expose them to possibly detrimental heat to melt in the organic material. Solution processing methods
- 10 need only to be employed to create bulk films while organic material infiltration can take place in the solid state after depositing the film.